

## **CHAPTER 9**

### **PREPARATION OF TARGETS**

#### **LESSON PLAN 9**

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#### **METHOD:**

Conference, demonstration, and practical exercise

#### **TIME ALLOTTED:**

1.0 hour

#### **COURSE PRESENTED TO:**

- a. BFV crews
- b. Instructors
- c. TSC personnel

#### **TOOLS, EQUIPMENT, AND MATERIALS:**

See Appendix A

#### **PERSONNEL:**

- a. Primary instructor
- b. Assistant instructor

#### **INSTRUCTIONAL AIDS:**

- a. Overhead projector
- b. Viewgraphs (Appendix C)

#### **REFERENCES:**

- a. TM 9-6920-710-12&P-1
- b. TM 9-1265-376-10
- c. FM 23-1

#### **APPENDICES:**

Appendix A. Tools, Equipment, and Materials  
Appendix B. Safety  
Appendix C. Viewgraphs

## 9-1. INTRODUCTION.

(5 minutes)

Note. Show Slide 1.

- a. **Reason.** To achieve the desired results from PGS, targets must be properly prepared for gunnery training.

Note. Show Slide 2.

- b. **Training Objective.** Given a MILES LTID, a retro reflector set, and a panel target, you will perform the following tasks:
  - (1) Follow all safety regulations during target preparation.
  - (2) Prepare an infantry target.
  - (3) Prepare a BMP frontal target.
  - (4) Prepare a T80 frontal target.
  - (5) Prepare a BMP flank target.
  - (6) Perform target emplacement.
- c. **Procedure.** During this block of instruction we will cover how to properly install both MILES LTIDs and retro reflector units on various panel targets used during panel gunnery training with PGS. You will have an assistant (small group) instructor for the practical exercise portion of this class.

## 9-2. CONFERENCE/DEMONSTRATION/PRACTICAL EXERCISE. (50 minutes)

Notes.

- 1. The primary instructor will release the student crews to their assigned assistant (small group) instructor for the practical exercise portion of this lesson.
- 2. Show Slide 3.

- a. **Safety During Target Preparation.** To prevent personal injury and equipment damage, observe the following safety procedures when installing MILES LTIDs and retro reflector units on targets:
  - (1) Place target lifter ON/OFF switch in OFF position.
  - (2) Disconnect target lifter battery to ensure that lifter will not be unintentionally raised.
  - (3) Ensure both LTID and retro reflector unit are securely mounted before lifting target.
  - (4) Ensure panel target is securely installed to target lifter.

Note. Show Slide 4.

- b. **Installation of Retro Reflector Unit.** The following installation procedure for the retro reflector unit is used for all targets.

## 9-2. CONFERENCE/DEMONSTRATION/PRACTICAL EXERCISE (Con't).

### (1) Temporary installation.

- (a) Using aerosol adhesive, attach two 6 in. pieces of velcro to panel target.
- (b) Place retro reflector unit on velcro. Verify that retro is securely attached.

### (2) Permanent installation.

- (a) Drill holes in panel target.
- (b) Use bolts with nuts to secure retro reflector unit.

Note. Show Slide 5.

#### c. **Preparation of Infantry Targets.** This target is intended for coax engagements.

- (1) Install retro reflector unit on center of mass of target.
- (2) Mount LTID in two vertical groups of three detectors on each side of retro reflector unit.

Note. Show Slide 6.

#### d. **Preparation of BMP Frontal Targets.** This target is intended for AP and HE engagements.

- (1) Install retro reflector unit on center of mass of target.
- (2) Mount LTID in two vertical groups of three detectors on each side of retro reflector unit.

Note. Show Slide 7.

#### e. **Preparation of T80 Frontal Targets.** This target is intended for TOW engagements.

- (1) Install retro reflector unit on center of mass of target.
- (2) Mount LTID in vertical groups of three detectors on each side of retro reflector unit.

Note. Show Slide 8.

#### f. **Preparation of BMP Flank Targets.** This target is intended for AP and HE engagements.

- (1) Install retro reflector unit on center of mass of target.
- (2) Mount LTID in vertical groups of three detectors on each side of retro reflector unit.

## 9-2. CONFERENCE/DEMONSTRATION/PRACTICAL EXERCISE (Con't).

Note. Show Slide 9.

- g. **Target Emplacement.** The following limitations must be considered during target emplacement. These limitations also apply for scaled gunnery training.

- (1) Targets equipped with retro reflector units must be laterally dispersed a minimum of 10 m between targets.
- (2) Targets equipped with retro reflector units must be separated a minimum of 30 m in depth between targets.

- Notes.
1. The primary instructor now releases the student crews to their assigned assistant (small group) instructors for the practical exercise portion of this lesson.
  2. Prior to students' arrival, ensure that an assistant instructor is assigned to each training station.
  3. Direct students to their appropriate training station.
  4. Each assistant instructor is to conduct a safety briefing for his small group IAW Appendix B.
  5. Whenever possible, have the students serve as demonstrators during small group instruction. Have one student read the procedures while another student performs the task. To ensure all students get equal hands-on time, rotate the reading and performance responsibilities.
  6. The assistant instructor discusses and clarifies the procedures as required and reinforces the training objective.
  7. Have students practice PGS target preparation.

## 9-3. FINAL REVIEW. (5 minutes)

- a. **Student Questions.**

Note. Show Slide 10.

- b. **Summary of Main Teaching Points.**

- (1) Safety regulations during target preparation
- (2) Preparation of infantry target
- (3) Preparation of BMP frontal target
- (4) Preparation of T80 frontal target
- (5) Preparation of BMP flank target
- (6) Target emplacement

Note. Show Slide 11.

**9-2. CONFERENCE/DEMONSTRATION/PRACTICAL EXERCISE (Con't).**

- c. **Closing Statement.** This block of instruction has taught you the proper procedures for installing MILES LTIDs and retro reflector units on various targets used in panel gunnery training with PGS. To achieve the desired training result with PGS, targets must be properly prepared.

## **APPENDIX A TO LESSON PLAN 9**

### **PREPARATION OF TARGETS**

#### **TOOLS, EQUIPMENT, AND MATERIALS**

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Listed equipment is one per class.

1. Panel target, T80 frontal
2. Panel target, BMP frontal
3. Panel target, BMP flank
4. Panel target, infantry troop
5. MILES LTID set
6. PGS retro reflector set
7. Target lifter
8. Velcro (NSN 6515-01-233-4392)
9. Adhesive (NSN 8040-00-262-9028)

## **APPENDIX B TO LESSON PLAN 9**

### **PREPARATION OF TARGETS**

#### **SAFETY**

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Listed general safety regulations are to be strictly enforced during all target preparation.

1. Do not stand on top of target when it is in the down position.
2. Ensure target control device is in OFF position before working on target lifter.
3. Ensure target lifter battery is disconnected before working on target.
4. Ensure both LTID and retro reflector units are securely mounted before lifting target.

**APPENDIX C  
TO LESSON PLAN 9**

**PREPARATION OF TARGETS**

**VIEWGRAPHS**

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